

1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/601,168B

DATE: 01/27/2003 TIME: 10:53:49

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3 <110> APPLICANT: BENAROUS, Richard.
         MARGOTTIN, Florence
  5
         DURAND, Herve
         ARENZANA SEISDEDOS, Fernando
  6
 7
         KROLL, Mathias
         CONDORCET, Jean-Paul
10 <120> TITLE OF INVENTION: Human beta-TrCP protein
12 <130> FILE REFERENCE: 935.38812X00
14 <140> CURRENT APPLICATION NUMBER: US/09/601,168B
15 <141> CURRENT FILING DATE: 2000-07-28
17 <150> PRIOR APPLICATION NUMBER: PCT/FR99/00196
18 <151> PRIOR FILING DATE: 1999-01-29
20 <150> PRIOR APPLICATION NUMBER: FR98 01100
21 <151> PRIOR FILING DATE: 1998-01-30
23 <150> PRIOR APPLICATION NUMBER: FR98 15545
24 <151> PRIOR FILING DATE: 1998-12-09
                                                            ENTERED
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28 <170> SOFTWARE: PatentIn Ver. 2.1 and manually
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31 <211> LENGTH: 2151
32 <212> TYPE: DNA
33 <213> ORGANISM: Artificial sequence
35 <220> FEATURE:
36 <221> NAME/KEY: CDS
37 <222> LOCATION: (70)..(1776)
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40 <223> OTHER INFORMATION: Description of the artificial sequence : \mbox{cDNA}
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62 gct atg aag act gag aat tgt gtg gcc aaa aca aaa ctt gcc aat ggc
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67	Thr	Ser	Ser	Met	Ile	Vaĺ	Pro	Lys	Gln	Arg	Lvs	Leu	Ser	Ala	Ser	Tvr	331
68		80					85					90					
70	gaa	aag	gaa	aag	gaa	ctg	tgt	gtc	aaa	tac	ttt	gag	caq	taa	tca	gag	399
/ I	GLu	Lys	Glu	Lys	Glu	Leu	Cys	Val	Lys	Tyr	Phe	Glu	Gln	Trp	Ser	Ğlu	
72	95					100					105					110	
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	rat	ttc	2+2		act	a+ ~	~~~	~~+	135					140			
84	Asn	Phe	Tle	Thr	7) la	Lou	Dro	gct N15	cgg	gga	ttg	gat	cat	atc	gct	gag	543
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	aac	att		tica	tac	cta	gat		222	tas	ct a	+~+	155	~~+	gaa		F 0.1
88	Asn	Ile	Leu	Ser	Tvr	Leu	Asp	Ala	Lvs	Ser	Len	Cve	71a	712	Glu	CLL	591
89		160			- 1 -		165	1114	LyJ	OCI	пси	170	н⊥а	Ala	GIU	Leu	
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														2 3 J. CJ	GTA	Ti-C u	
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97 99 100 101 103 104 105 107 108 109 111 112 113 115 116 117 119 120 121 123 124	gca Ala gac Asp att Ile cat His 255 tac Tyr aac Asn ctc	gaa Glu ggg Gly ata Ile 240 agt Ser tgt Cys aca Thr	Arg aat Asn 225 caa Gln tta Leu tta Leu atc Ile ggc Gly	aga Arg 210 gct Ala gac Asp cag Gln cag Gln aag Lys 290 cat	gga Gly cct Pro att Ile aga Arg tat Tyr 275 atc Ile aca	tgg Trp ccc Pro gag Glu att Ile 260 gat Asp tgg Trp	gga Gly aac Asn aca Thr 245 cac His gat Asp gat	cag Gln tct Ser 230 ata Ile tgc Cys cag Gln aaa Lys gtc Val	tat Tyr 215 ttt Phe gaa Glu cga Arg aaa Lys aac Asn 295 ctc	200 tta Leu tat Tyr tct Ser agt Ser ata Ile 280 aca Thr	ttc Phe aga Arg aat Asn gaa Glu 265 gta Val ttg Leu ctc	aaa Lys gca Ala tgg Trp 250 aca Thr agc Ser gaa Glu	aac Asn ctt Leu 235 aga Arg agc Ser ggc Gly tgc Cys tat Tyr	aaa Lys 220 tat Cys aaa Lys ctt Leu aag Lys 300 gat	205 cct Pro cct Pro gga Gly gga Arg 285 cga Arg	cct Pro aaa Lys aga Arg gtt Val 270 gac Asp att Ile	783 831 879 927 975
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172	tgg	gat	ctt	gtg	gct	gct	ttg	gac	CCC	cgt	gct	cct	gca	ggg	aca	ctc	1599							
1/3	$_{\rm LLb}$	Asp	Leu	Val	Ala	Ala	Leu	Asp	Pro	Arg	Ala	Pro	Ala	Gly	Thr	Leu								
174		. 1				500					505					510								
177	Cur	cta	cgg	acc	ctt	gtg	gag	cat	tcc	gga	aga	gtt	ttt	cga	cta	cag	1647							
178	Cys	ьeu	Arg	Thr	Leu	Val	GIu	His	Ser		Arg	Val	Phe	Arg	Leu	Gln								
	+++	a > t	~		515					520					525									
181	Dho	yaı Nan	Clu	Dha	cag	att	gtc	agt	agt	tca	cat	gat	gac	aca	atc	ctc	1695							
182	THE	ASP	GIU	E 20	GIII	Ile	val	Ser	Ser	Ser	His	Asp	Asp		Ile	Leu								
	atc	taa	a a c	530	at a	a a t	~		535					540										
185	Tle	Trn	yac Aen	Dho	Ton	aat	gat	cca	gct	gcc	caa	gct	gaa	CCC	CCC	cgt	1743							
186	110	тър	545	rne	ьеu	Asn.	ASP	ero	Ата	Ата	GIn	Ala	Glu	Pro	Pro	Arg								
	tcc	cct		cas	202	+ 2 0		550		4			555											
189	Ser	Pro	Sar	Cya ∆ra	Thr	Tyr	acc The	Lac m	atc	TCC	aga	taaa	taac	ca t	acac	tgacc	1796							
190	001	560	OCI .	Ary	1111		565	ıyr	тте	ser.	Arg													
			מכ כ	cadd	2000			++~-	~~4	A 4- 4- 4					i									
194	gage	tcatacttgc ccaggaccca ttaaagttgc ggtatttaac gtatctgcca ataccaggat gagcaacaac agtaacaatc aaactactgc ccagtttccc tggactagcc gaggagcagg											1856											
196	actt	tasa	ac t	yraa ccta	caal ttaa	c ad	actd	ttgc	+ -+	yttt ~~-	CCC	tgga	ctag	cc g	agga	gcagg	1916							
	9000	-yuy	المال	cery	LLYY	y ac	acag	LLGG	LCT	ycag	LCG	gccc	agga	196 gctttgagac tcctgttggg acacagttgg tctgcagtcg gcccaggacg gtctactcag 197										

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/601,168B

DATE: 01/27/2003 TIME: 10:53:50

Input Set : A:\EP.txt

Output Set: N:\CRF4\01242003\I601168B.raw

198 cacaactgac tgcttcagtg ctgctatcag aagatgtctt ctatcaattg tgaatgattg 2036 200 gaacttttaa acctcccctc ctctcctcct ttcacctctg cacctagttt tttcccattg 2096 202 gttccagaca aaggtgactt ataaatatat ttagtgtttt gccagaaaaa aaaaa 204 <210> SEQ ID NO: 2 205 <211> LENGTH: 569 206 <212> TYPE: PRT 207 <213> ORGANISM: Artificial sequence 209 <220> FEATURE: 210 <223> OTHER INFORMATION: Description of the artificial sequence : $\ensuremath{\mathtt{cDNA}}$ coding for human beta-TrCP protein 214 <400> SEQUENCE: 2 215 Met Asp Pro Ala Glu Ala Val Leu Gln Glu Lys Ala Leu Lys Phe Met 216 1 218 Asn Ser Ser Glu Arg Glu Asp Cys Asn Asn Gly Glu Pro Pro Arg Lys 20 25 221 Ile Ile Pro Glu Lys Asn Ser Leu Arg Gln Thr Tyr Asn Ser Cys Ala 35 224 Arg Leu Cys Leu Asn Gln Glu Thr Val Cys Leu Ala Ser Thr Ala Met 225 50 55 227 Lys Thr Glu Asn Cys Val Ala Lys Thr Lys Leu Ala Asn Gly Thr Ser 70 75 230 Ser Met Ile Val Pro Lys Gln Arg Lys Leu Ser Ala Ser Tyr Glu Lys 90 233 Glu Lys Glu Leu Cys Val Lys Tyr Phe Glu Gln Trp Ser Glu Ser Asp 100 105 236 Gln Val Glu Phe Val Glu His Leu Ile Ser Gln Met Cys His Tyr Gln 237 115 125 239 His Gly His Ile Asn Ser Tyr Leu Lys Pro Met Leu Gln Arg Asp Phe 130 135 242 Ile Thr Ala Leu Pro Ala Arg Gly Leu Asp His Ile Ala Glu Asn Ile 150 155 245 Leu Ser Tyr Leu Asp Ala Lys Ser Leu Cys Ala Ala Glu Leu Val Cys 170 248 Lys Glu Trp Tyr Arg Val Thr Ser Asp Gly Met Leu Trp Lys Lys Leu 249 180 185 251 Ile Glu Arg Met Val Arg Thr Asp Ser Leu Trp Arg Gly Leu Ala Glu 252 195 200 254 Arg Arg Gly Trp Gly Gln Tyr Leu Phe Lys Asn Lys Pro Pro Asp Gly 210 215 257 Asn Ala Pro Pro Asn Ser Phe Tyr Arg Ala Leu Tyr Pro Lys Ile Ile 258 225 230 235 260 Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg Cys Gly Arg His Ser 245 250 263 Leu Gln Arg Ile His Cys Arg Ser Glu Thr Ser Lys Gly Val Tyr Cys 264 260 265 268 Leu Gln Tyr Asp Asp Gln Lys Ile Val Ser Gly Leu Arg Asp Asn Thr 275 280 271 Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu Cys Lys Arg Ile Leu Thr 272 290 295

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/601,168B

DATE: 01/27/2003 TIME: 10:53:50

Input Set : A:\EP.txt

Output Set: N:\CRF4\01242003\I601168B.raw

274 Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr Asp Glu Arg Val Ile 310 315 277 Ile Thr Gly Ser Ser Asp Ser Thr Val Arg Val Trp Asp Val Asn Thr 325 330 280 Gly Glu Met Leu Asn Thr Leu Ile His His Cys Glu Ala Val Leu His 340 345 283 Leu Arg Phe Asn Asn Gly Met Met Val Thr Cys Ser Lys Asp Arg Ser 355 360 286 Ile Ala Val Trp Asp Met Ala Ser Pro Thr Asp Ile Thr Leu Arg Arg 375 289 Val Leu Val Gly His Arg Ala Ala Val Asn Val Val Asp Phe Asp Asp 390 395 292 Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr Ile Lys Val Trp Asn 405 410 295 Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn Gly His Lys Arg Gly 420 425 298 Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val Val Ser Gly Ser Ser 299 435 440 301 Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys Gly Ala Cys Leu Arg 455 460 304 Val Leu Glu Gly His Glu Glu Leu Val Arg Cys Ile Arg Phe Asp Asn 470 475 307 Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys Ile Lys Val Trp Asp 485 490 310 Leu Val Ala Ala Leu Asp Pro Arg Ala Pro Ala Gly Thr Leu Cys Leu 500 505 313 Arg Thr Leu Val Glu His Ser Gly Arg Val Phe Arg Leu Gln Phe Asp 515 520 316 Glu Phe Gln Ile Val Ser Ser Ser His Asp Asp Thr Ile Leu Ile Trp 530 535 540 319 Asp Phe Leu Asn Asp Pro Ala Ala Gln Ala Glu Pro Pro Arg Ser Pro 550 555 322 Ser Arg Thr Tyr Thr Tyr Ile Ser Arg 326 <210> SEQ ID NO: 3 327 <211> LENGTH: 19 328 <212> TYPE: DNA 329 <213> ORGANISM: Artificial sequence 331 <220> FEATURE: 332 <223> OTHER INFORMATION: Description of the artificial sequence: sense primer 334 <400> SEQUENCE: 3 335 ccaaactgcg tataacgcg 19 338 <210> SEQ ID NO: 4 339 <211> LENGTH: 20 340 <212> TYPE: DNA 341 <213> ORGANISM: Artificial sequence 343 <220> FEATURE: 344 <223> OTHER INFORMATION: Description of the artificial sequence: antisense primer 346 <400> SEQUENCE: 4



RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/09/601,168B

DATE: 01/27/2003 TIME: 10:53:51

Input Set : A:\EP.txt

Output Set: N:\CRF4\01242003\I601168B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 4,5